

Application No. 09/584,604
Amendment dated December 17, 2003
Reply to Office Action of November 28, 2003

REMARKS

Claims 1, 3-7, 9-11, 13-17, 19-21 and 22-25 stand rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 5,706,483 to Patrick et al. (hereinafter, "Patrick") and further in view of U.S. Patent Application Publication No. US 2003/01013056 to Margulis, (hereinafter "Margulis"). Claim 1 calls for a method that includes performing a first pixel transformation at the first virtual memory location in a virtual memory space, using a one-way re-mapping to write the transformed pixel data from the first virtual memory location to the virtual memory address generated for the second memory location, and transferring the pixel data to a memory controller using a memory controller client, in a forward, write-through direction.

However, the Patrick reference fails to teach or suggest use of a one-way re-mapping to write the transformed pixel data and use of a memory controller client in a forward write-through direction when a first pixel transformation is performed at a first virtual memory location in a virtual memory space. In contrast, the Margulis reference fails to provide mapping of transfer functions onto a virtual memory space such that one or more transfer functions may be applied on the pixel data in parallel instead of applying it serially. Therefore, even if combined, the Patrick and Margulis references fail to teach or suggest all the limitations of claim 1 as a whole. Since claim 1 is not rendered obvious in a *prima facie* manner, the Examiner is respectfully requested to reconsider the § 103 rejection of claim 1 and the claims depending therefrom.

As set forth in Applicant's specification, for passive pixel data operations, an application may write pixels to a range of virtual memory addresses and the passive engine may impose the chosen operation. In this manner, using a one-way re-mapping, e.g., a new "re-mapped" memory address is generated and the pixel data is written to the new memory location. See Applicant's specification on page 4, lines 18-25 and Figure 3.

The pixel data written to a transfer function memory address range 29 goes through a transformation and has its address translated or re-addressed as indicated at 20 in Figure 3 of the

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Applicant's specification. Each transfer function 19 defined in media port target 16 has a defined output memory address range 28. See on page 6, lines 16-22. The pixel data and addresses generated by the various transfer functions 18 may be written back to the memory controller 14. See on page 7, in Applicant's specification in lines 8-10 and Figure 3.

In this manner, the cited Patrick and Margulis references fail to render all the limitations *prima facie* obvious in the manner suggested by the Examiner. For the similar reasons for which claim 1 is patentably distinguishable over the cited art, the Applicant submits that independent claims 11 and 21 along with their respective dependent claims are also in condition for allowance which is respectfully requested of the Examiner. The Examiner is respectfully requested to consider all pending claims.

In view of these remarks, the application is now in condition for allowance and the Examiner's prompt action in accordance therewith is respectfully requested.

Respectfully submitted,



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